

ABSTRACT

A digital telephone system for processing a plurality of information signals received in parallel over telephone lines from a public network exchange which are then transmitted in parallel over a plurality of radio frequency (RF) channels to a plurality of mobile subscriber units, each capable of receiving on any of those RF channels, includes an exchange, signal compressors, a multiplexer, a transmitter and a central processing unit. The central processing unit is responsive to a received connection request signal by providing an assignment signal indicating a slot and an RF channel to be used for the respective information signal. The central processing unit maintains a memory of which slots and which RF channels are so assigned and consults the memory upon receipt of the connection request signal and then provides the assignment signal that establishes the utilization of one of the slots at one of the RF channels that is not assigned to another information signal.